Field Crops

Growing Season Weather Summary

Dr. Jeff Andresen, Michigan State University

The 2007 growing season in Michigan had some of the worst drought conditions experienced in the State in 20 years. Prior to the growing season, precipitation totals were above normal, leaving much of the State with a full or nearly full soil moisture profile entering the growing season. As of early April, the Palmer Drought Severity Index categorized all of the Lower Peninsula as 'Unusually' to 'Extremely Moist', with 'Near Normal' values for the Upper Peninsula.

Following a brief period of abnormal warmth during late March which allowed some initial fieldwork, a record-breaking cold air mass moved into the State on April 3, bringing an unusual late season lake effect snowfall event to all areas of the State. Snowfall totals by April 8 exceeded 50 inches in some areas of the Upper Peninsula. Sub-freezing temperatures occurred in all areas of the State from April 4 to 8, with low temperatures falling into the teens and 20's in the south to as low as -5°F in sections of the Upper Peninsula. The cold, wet weather generally delayed spring fieldwork and planting until late in the month. A return to warmer and drier than normal weather in early May allowed rapid planting progress and favored early crop establishment.

Beginning at the end of May, an extended period of sunny, dry, and warm weather persisted well into August across most sections of the State. During June, the sunny, warm, and dry weather caused moisture reserves in the soil profile to fall sharply, leaving crops entering the period of the growing season with highest water needs with depleted moisture levels.

Hot and abnormally dry conditions continued through July into early August, stressing crops during critical pollination stages of development. By mid-August, precipitation deficits for the growing season beginning April 1 had grown in many areas to the 3 to 5-plus inch range, even given the wetter than normal conditions early in the season. The areas of greatest precipitation deficits included areas of the southwestern and eastern Lower Peninsula as well as the western Upper Peninsula, where totals from mid-June through early August were less than 25 percent of normal. In some areas of the State, July 2007 was one of the five driest on record. The extended drought conditions resulted in yield reductions to many crops, especially those on coarse-textured soils or where soil compaction was present. A break in the drought began in mid-August. A southward shift of the jet stream led to the persistence of a stationary front across the region. The front served as a focusing mechanism for heavy rainfall across much of the Upper Midwest including the Lower Peninsula of Michigan. Ironically, some locations in the State recorded more than 10 inches of rain over a two week period of late August that resulted in flooding. Overall, rain from this system came just in time to benefit many crops and prevented further reductions in crop yields.

Milder and drier than normal weather returned to the State during much of September and early October. The warm temperatures led to rapid maturation of crops. The first killing frost over much of the State was much later than normal in late October and favored rapid grain drydown rates. The unusually mild, dry September and October led to significant savings for growers in reduced drying costs.

Overall for the 5-month May to September period, precipitation totals were much below normal levels in most northern and central sections of the State. It was the third consecutive year in northern sections in which this occurred. Precipitation levels were much above normal across southern sections of the Lower Peninsula. Mean temperatures and seasonal growing degree day accumulations were generally above the climatological normals. As is the case in many growing seasons, the overall averages or totals cannot describe the variability of weather conditions that took place during the season, with wide swings from extreme drought to excessive wetness within the course of only a few weeks.

Field crops: Acres harvested and value of production, 2003-2007

Item	Unit	2003	2004	2005	2006	2007
Acres harvested	1,000 acres	6,418	6,372	6,481	6,461	6,444
Value of production	1,000 dollars	1,768,563	1,653,098	1,709,004	2,323,289	2,709,690

Grain storage capacity, December 1, 2003-2007

Year	Off farm		On farm capacity
	Facilities	Rated capacity	
	Number	*Million bushels*	*Million bushels*
2003	220	145	240
2004	215	150	250
2005	215	148	250
2006	211	155	260
2007	210	160	270

Field crops: Record highs and lows

Crop	Unit	Record high		Record low		Year estimates started
		Quantity	Year	Quantity	Year	
Barley						
Harvested acres	1,000 acres	303	1932	11	2005	1866
Yield per acre	Bushels	68.0	1985	13.5	1933	
Production	1,000 bu	8,400	1918	517	2005	
Dry Edible beans						
Harvested acres	1,000 acres	690	1930	130	2001	1909
Yield per acre	Pounds	2,100	1999	320	1917	
Production	1,000 cwt	8,585	1963	780	2001	
Corn for grain						
Harvested acres	1,000 acres	2,800	1981	480	1866	1866
Yield per acre	Bushels	147.0	2006	21.5	1917	
Production	1,000 bu	293,180	1982	15,120	1869	
Corn for silage						
Harvested acres	1,000 acres	498	1971	210	2003	1924
Yield per acre	Tons	18.0	2004	4.7	1930	
Production	1,000 tons	5,565	1977	1,542	1930	
Hay, alfalfa						
Harvested acres	1,000 acres	1,444	1950	74	1919	1919
Yield per acre	Tons	4.2	1993	1.1	1934	
Production	1,000 tons	5,040	1985,1986	118	1919	
Hay, all						
Harvested acres	1,000 acres	2,947	1924	780	1866	1866
Yield per acre	Tons	3.8	1993	0.6	1895	
Production	1,000 tons	5,743	1986	1,014	1866	
Oats						
Harvested acres	1,000 acres	1,658	1918	55	2001,2007	1866
Yield per acre	Bushels	70.0	2003	18.5	1921	
Production	1,000 bu	69,388	1946	3,190	2007	
Potatoes						
Harvested acres	1,000 acres	374.0	1895	36.4	1975	1866
Yield per acre	Cwt	350.0	2007	26.0	1887,1916	
Production	1,000 cwt	23,256	1904	3,557	1876	
Soybeans						
Harvested acres	1,000 acres	2,130	2001	1	1930	1924
Yield per acre	Bushels	45.0	2006	8.0	1927	
Production	1,000 bu	89,550	2006	10	1930	
Spearmint						
Harvested acres	1,000 acres	8.7	1954	0.7	1935	1935
Yield per acre	Pounds	60.0	2006,2007	20.0	1965	
Production	1,000 lbs	280	1948	27	1996	
Sugarbeets						
Harvested acres	1,000 acres	190	1999	48	1943,1953	1909
Yield per acre	Tons	23.4	2007	5.5	1916	
Production	1,000 tons	3,573	2006	298	1943	
Wheat, winter						
Harvested acres	1,000 acres	1,515	1953	400	1987	1909
Yield per acre	Bushels	73.0	2006	10.5	1912	
Production	1,000 bu	47,450	2006	7,350	1912	

Barley

Michigan barley growers planted 14,000 acres and harvested 13,000 acres in 2007. Total production was 728,000 bushels, up 6 percent from 2006. The average yield increased by 7 bushels to 56 bushels per acre. Barley planting began in April and progressed ahead of the five-year average. Despite a cool, wet spring slowing planting and early development, warmer and drier conditions later in the growing season advanced crop progress ahead of normal. By the middle of June, 98 percent of the crop had emerged. Going into harvest, more than 75 percent the crop was rated in fair to good condition.

Barley: Acres, yield, production, and value, 2003-2007

Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Bushels*	*1,000 bushels*	*Dollars*	*1,000 dollars*
2003	15	14	56	784	1.70	1,333
2004	14	12	51	612	1.80	1,102
2005	15	11	47	517	1.80	931
2006	15	14	49	686	1.80	1,235
2007	14	13	56	728	2.50	1,820

[1] Marketing year average.

Corn

There were 2.65 million acres planted to corn in 2007, up 450,000 acres from 2006. Grain corn production was 291.4 million bushels, up 1 percent from 2006; 2.35 million acres were harvested for grain. The yield of 124 bushels per acre was down 23 bushels per acre from the 2006 crop. Farmers harvested 280,000 acres of corn for silage; the average yield was 15.0 tons per acre.

Planting of corn in Michigan began in mid-April, about the normal schedule. Wet field condition in late April and early May hampered planting efforts. Dry, warm weather returned in mid-May, and planting progressed rapidly. Planting was virtually complete by June 7, slightly ahead of normal. Warm weather in late May and early June kept emergence progress ahead of normal. By mid-June, almost all plants were emerged, ahead of average. Dry conditions were becoming a concern, as rainfall across the State since April 1 was about an inch below normal. By August 1, yield prospects for major corn areas were poor. Cumulative rainfall since April 1 was 2 to 3 inches below normal in major corn growing areas. Most of this shortfall occurred during the critical growing period for corn, June and July. As of July 31, about 60 percent of the State was in drought. The crop was about one week ahead of the average stage of development as of September 1. Rainfall in August was 1 to 4 inches above normal in major corn areas. This did not have a substantial positive influence on potential yields since most of the crop had silked by August 1. Only one-fourth of the acreage was rated good to excellent at the outset of September. Eighty-eight percent of the corn in Michigan had reached maturity by Oct. 1, well ahead of the average 63 percent. Harvest began about September 15. Combining conditions were excellent, and progress was ahead of normal throughout the harvest season. There was more than normal abandonment.

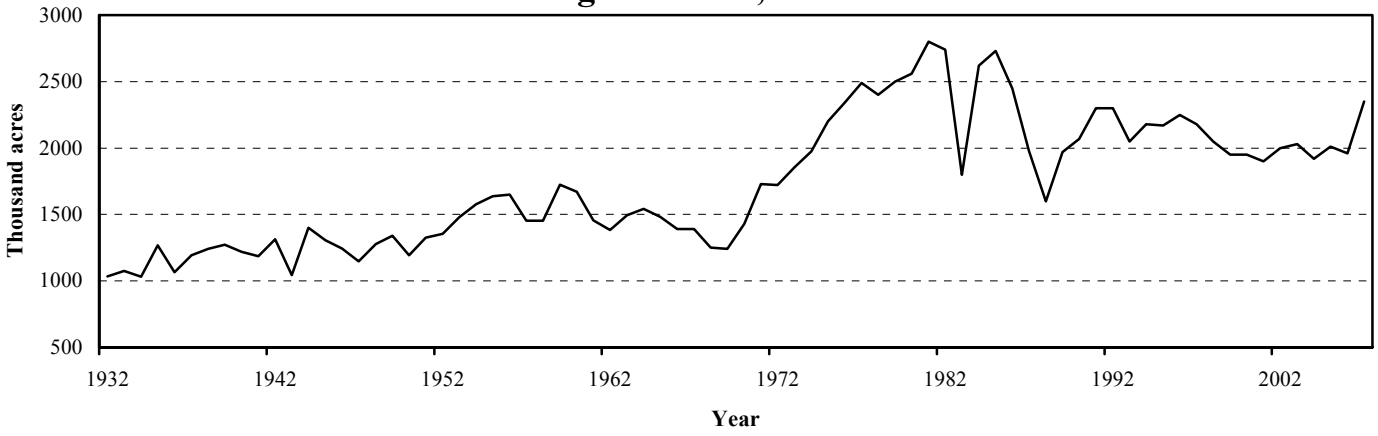
The 2007 corn crop was valued at $1.15 billion, up 29 percent from 2006. Corn continued to be Michigan's number one crop in value of production. The top three counties in corn production in 2007 were Lenawee, Huron, and Saginaw.

Corn: Acres, yield, production, and value, 2003-2007

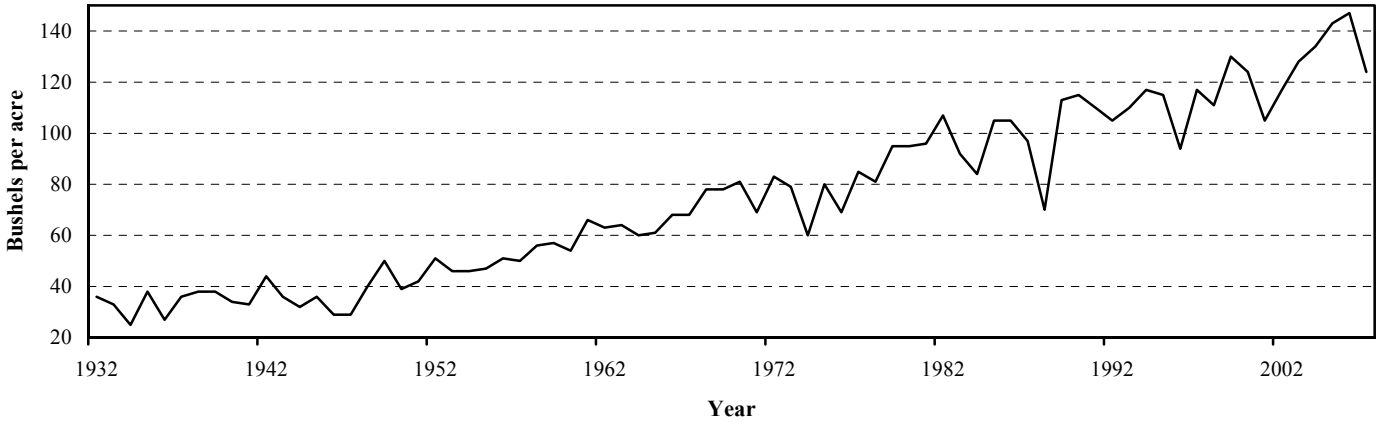
Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Bushels*	*1,000 bushels*	*Dollars*	*1,000 dollars*
All						
2003	2,250					
2004	2,200					
2005	2,250					
2006	2,200					
2007	2,650					
Grain						
2003		2,030	128	259,840	2.37	615,821
2004		1,920	134	257,280	1.97	506,842
2005		2,010	143	287,430	1.88	540,368
2006		1,960	147	288,120	3.10	893,172
2007		2,350	124	291,400	3.95	1,151,030
	1,000 acres	*1,000 acres*	*Tons*	*1,000 tons*		
Silage						
2003		210	16.0	3,360		
2004		265	18.0	4,770		
2005		230	17.5	4,025		
2006		230	16.5	3,795		
2007		280	15.0	4,200		

[1] Marketing year average.

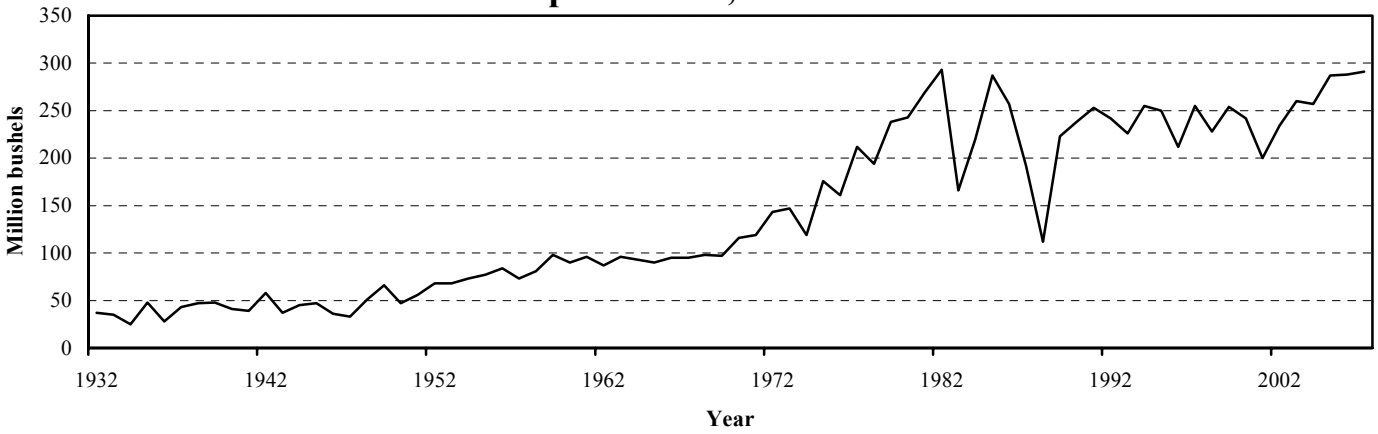
Corn for grain acres, 1932-2007



Corn yield, 1932-2007



Corn production, 1932-2007



Corn for grain: Stocks by quarter, 2003-2007

Crop year	December 1		March 1		June 1		September 1	
	On farm	Off farm	On farm	Off farm	On farm	Off farm	On farm	Off farm
	1,000 bushels	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
2003	140,000	56,500	77,000	51,300	43,000	34,600	16,000	13,200
2004	140,000	60,600	100,000	48,350	59,000	30,000	23,000	15,900
2005	165,000	71,900	110,000	56,500	65,000	39,000	31,000	15,000
2006	145,000	59,000	88,000	53,400	52,000	32,900	12,500	11,900
2007	140,000	64,500	87,000	53,100	43,000	46,200		

Corn: Percentage of acreage planted, 2003-2007

Year	Month and day					
	April		May			June
	20	30	10	20	30	10
2003	0	11	33	48	83	97
2004	8	34	61	68	77	90
2005	17	34	68	87	98	100
2006	3	31	69	84	93	100
2007	1	12	48	80	95	100
5-year-average	5.7	24.7	55.8	73.3	89.3	97.3

Corn: Percentage of acreage silked, 2003-2007

Year	Month and day					
	July				August	
	1	10	20	30	10	20
2003	0	1	3	40	86	98
2004	0	1	27	61	74	86
2005	0	7	47	91	97	100
2006	0	6	44	84	95	100
2007	0	14	50	77	94	100
5-year-average	0.0	5.7	34.3	70.5	89.1	96.8

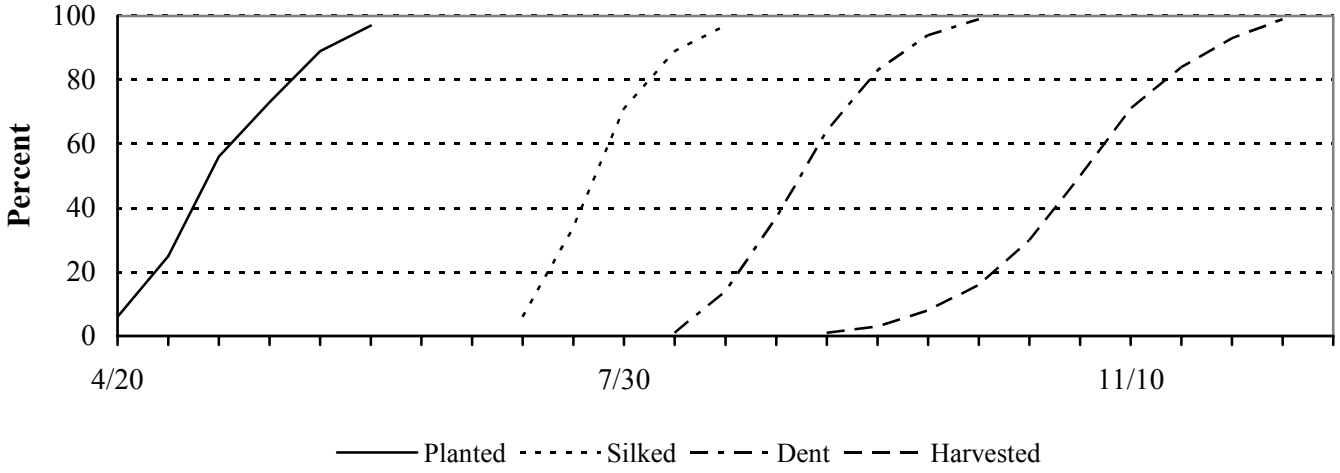
Corn: Percentage of acreage dent stage, 2003-2007

Year	Month and day						
	August			September			October
	10	20	30	10	20	30	10
2003	0	1	16	40	73	91	99
2004	0	1	11	34	58	82	96
2005	0	20	55	84	97	99	100
2006	1	27	55	84	93	98	100
2007	2	22	45	77	92	100	100
5-year-average	0.6	14.4	36.5	63.9	82.5	93.9	99.0

Corn: Percentage of acreage harvested for grain, 2003-2007

Year	Month and day									
	September			October			November			December
	10	20	30	10	20	30	10	20	30	10
2003	0	0	4	7	19	37	54	78	91	100
2004	0	0	3	13	25	49	68	82	93	100
2005	2	7	14	28	48	75	91	96	99	100
2006	0	2	5	10	20	34	59	71	84	94
2007	0	4	12	23	35	57	81	92	99	100
5-year-average	0.5	2.6	7.6	16.1	29.5	50.2	70.6	83.9	93.1	98.8

Corn progress
Five-year average, 2003-2007



Dry Edible Beans

Michigan dry bean planting was completed ahead of the 5-year average. The crop condition was rated 42 percent good to excellent for the week ending July 29, 2007, compared to 71 percent for the week ending July 31, 2006. Dry conditions persisted through the summer, decreasing yields from previous years. Harvest began the first week of September for early planted fields. Eighty percent was harvested by October 1, 2007, and was mostly completed by October 15, 2007. Yields were generally lower due to excessive dry conditions in mid-June to the beginning of August. New pod growth did occur with timely rains during August. Some farmers reported this increased their yields while other farmers reported this increased immature pod development and delayed harvest.

Michigan's 2007 total dry bean production was 3.1 million hundredweight (cwt), which represented 12.3 percent of U.S. production. Michigan ranked second in dry bean production for 2007. The number one dry bean producer in the nation was North Dakota with 10.6 million cwt, up 38 percent from last year.

Dry edible beans: Acres, yield, production, and value, 2003-2007

Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Pounds*	*1,000 cwt*	*Dol/cwt*	*1,000 dollars*
2003	170	165	1,500	2,475	19.30	47,768
2004	190	185	1,700	3,145	22.50	70,763
2005	235	230	1,700	3,910	19.60	76,636
2006	225	215	1,900	4,085	21.10	86,194
2007	200	195	1,600	3,120	28.50	88,920

[1] Marketing year average.

Dry edible beans: Acres, yield, and production, by class, 2003-2007

Class and Year	Planted	Harvested	Yield	Production
	Acres	*Acres*	*Pounds*	*1,000 cwt*
Black				
2003	45,000	43,000	1,580	680
2004	74,000	73,000	1,770	1,290
2005	65,000	64,000	1,770	1,130
2006	91,600	86,600	1,930	1,670
2007	96,500	94,500	1,630	1,540
Cranberry				
2003	12,000	12,000	1,180	142
2004	9,500	9,000	1,440	130
2005	10,500	9,500	1,470	140
2006	8,000	7,900	1,460	115
2007	6,900	6,800	1,290	88
Great Northern				
2003	8,000	8,000	1,680	134
2004	1,000	1,000	1,600	16
2005	2,000	1,800	1,660	30
2006	500	500	2,000	10
2007 [1]				
Navy				
2003	40,000	38,000	1,560	592
2004	55,000	54,000	1,800	970
2005	75,500	74,500	1,760	1,310
2006	80,000	77,500	1,960	1,520
2007	61,000	59,500	1,660	990
Pinto				
2003	11,000	10,500	1,430	150
2004	7,000	6,500	1,710	111
2005	18,000	17,500	1,600	280
2006	5,000	4,900	1,900	93
2007	4,000	3,900	1,490	58
Red kidney, dark				
2003	9,000	9,000	1,330	120
2004	7,000	6,500	1,230	80
2005	8,000	7,700	1,430	110
2006	4,000	3,600	1,170	42
2007	2,300	2,000	900	18
Red kidney, light				
2003	16,000	15,500	1,540	239
2004	15,000	14,500	1,460	212
2005	17,000	16,800	1,430	240
2006	11,300	10,300	1,700	175
2007	8,600	8,400	1,180	99
Small, red				
2003	19,000	19,000	1,470	280
2004	15,500	15,000	1,740	261
2005	31,000	30,500	1,770	540
2006	20,000	19,500	2,000	390
2007	16,000	15,500	1,630	253
Other				
2003	10,000	10,000	1,380	138
2004	6,000	5,500	1,360	75
2005	8,000	7,700	1,690	130
2006	4,600	4,200	1,670	70
2007	4,700	4,400	1,680	74

[1] Included in Other class.

Hay and Haylage

Michigan hay production was estimated at 2.88 million tons, down from 3.67 in 2006. Alfalfa and alfalfa mixtures accounted for 81 percent of all dry hay produced. All hay harvested acres were estimated at 1.08 million, down from 1.14 million in 2006. The average all hay yield was 2.67 tons per acre, down from 3.22 the previous year. Alfalfa stands began the season in good condition with little damage from winterkill. First cuttings started in late May. There were several reports of alfalfa weevil in the southern areas with some damage to the crop. Hay cuttings advanced ahead of normal throughout the summer. September rains helped hay re-growth, but harvest was slowed due to cooler weather. Fourth cuttings were completed in November. Alfalfa accounted for 800,000 acres of the total harvested with a yield of 2.9 tons per acre. Other hay accounted for 280,000 acres with a yield of 2.0 tons per acre. Value of the hay crop was $334 million, down 3 percent from 2006.

Hay, haylage, and greenchop: Acres, yield, production, and value, 2003-2007

Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Tons*	*1,000 tons*	*Dollars*	*1,000 dollars*
All dry hay						
2003		1,050	2.97	3,120	93.00	295,240
2004		1,100	2.97	3,270	94.50	304,525
2005		1,150	2.86	3,290	90.00	294,180
2006		1,140	3.22	3,670	94.00	343,714
2007		1,080	2.67	2,880	117.00	334,320
Alfalfa hay						
2003		850	3.20	2,720	97.00	263,840
2004		850	3.20	2,720	97.50	265,200
2005		900	3.10	2,790	92.00	256,680
2006		830	3.60	2,988	97.00	289,836
2007		800	2.90	2,320	119.00	276,080
Alfalfa seedings						
2003	130					
2004	135					
2005	135					
2006	120					
2007	100					
Other hay						
2003		200	2.00	400	78.50	31,400
2004		250	2.20	550	71.50	39,325
2005		250	2.00	500	75.00	37,500
2006		310	2.20	682	79.00	53,878
2007		280	2.00	560	104.00	58,240
All haylage and greenchop						
2003		270	5.50	1,486		
2004		335	6.03	2,020		
2005		320	6.50	2,080		
2006		300	6.64	1,992		
2007		295	6.76	1,995		
Alfalfa haylage and greenchop						
2003		250	5.60	1,400		
2004		310	6.20	1,922		
2005		300	6.70	2,010		
2006		280	6.90	1,932		
2007		280	7.00	1,960		

[1] Marketing year average.

Hay: Stocks on farms, 2004-2008

Year	May 1	December 1
	1,000 tons	*1,000 tons*
2004	250	1,893
2005	500	1,852
2006	395	2,385
2007	350	1,700
2008	320	([1])

[1] Published in January 2009.

Maple Syrup

Michigan maple syrup production was estimated at 100,000 gallons for the 2008 season, 40,000 gallons above 2007. This was the highest on record since 1964, when 110,000 gallons were produced. The tapping season was relatively short with most producers starting later than normal. Producers reported the syrup was better than average quality, with higher sugar content throughout most of the season. The length of the season was 23 days, compared to 20 days in 2007. Producers indicated that 50 percent of the syrup was medium in color.

Michigan was ranked sixth in maple syrup production in 2008 and produced 6 percent of the total U.S. production. Total taps were 405,000, and the syrup yield was 0.247 gallons per tap. The average price per gallon sold in 2007 was $41.60, and the value of production was $2.496 million, falling 14 percent from 2006.

Maple syrup: Taps, yield, production, price, and value, 2004-2008

Year	Taps	Yield per tap	Production	Price per gallon	Value of production
	1,000	*Gallons*	*1,000 gallons*	*Dollars*	*1,000 dollars*
2004	370	0.216	80	38.00	3,040
2005	390	0.149	58	36.00	2,088
2006	375	0.208	78	37.00	2,886
2007	400	0.150	60	41.60	2,496
2008	405	0.247	100	([1])	([1])

[1] Published in June 2009.

Mint

Mint: Acres, yield, production, and value, 2003-2007

Year	Harvested	Yield	Production	Price per pound [1]	Value of production
	1,000 acres	*Pounds*	*1,000 Pounds*	*Dollars*	*1,000 dollars*
Peppermint					
2003	1.1	40	44	11.00	484
2004	1.0	45	45	10.90	491
2005	1.0	35	35	12.00	420
2006	0.7	50	35	13.50	473
2007	0.7	40	28	14.40	403
Spearmint					
2003	1.6	40	64	9.50	608
2004	1.6	45	72	9.30	670
2005	1.6	35	56	9.50	532
2006	1.6	60	96	10.00	960
2007	1.5	60	90	12.00	1,080

[1] Marketing year average.

Oats

There was a decline in oat acreage for the State in 2007. Growers planted 70,000 acres of oats in 2007, compared with 80,000 the previous year. Harvested acres, at 55,000, were also down 10,000 from last year. The 2007 oat production was 3.19 million bushels, down 21 percent from the previous year. Yield, at 58 bushels per acre, was down 4 bushels from 2006.

Wet conditions early in the spring delayed planting, but favorable weather conditions through May pushed planting ahead of normal. Warm and dry conditions during the growing season rapidly advanced the crop. By July 1, about 80 percent of the crop was headed and 13 percent had begun to turn yellow. Harvest began in mid-July and was completed by the end of August. For 2007, Sanilac County was again ranked first in oat production, while Clinton, Presque Isle, Huron, and Shiawassee rounded out the top five counties.

Oats: Acres, yield, production, and value, 2003-2007

Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Bushels*	*1,000 bushels*	*Dollars*	*1,000 dollars*
2003	90	75	70	5,250	1.65	8,663
2004	80	65	68	4,420	1.72	7,602
2005	90	75	61	4,575	1.89	8,647
2006	80	65	62	4,030	1.93	7,778
2007	70	55	58	3,190	2.60	8,294

[1] Marketing year average.

Potatoes

Michigan's 2007 potato production was 14.70 million hundredweight (cwt) up slightly from 14.19 million in 2006. Planted acres were 42,500 and harvested acres were 42,000. The State's average yield was a record high 350 cwt per acre, up from the 2006 yield of 330 cwt. Potato planting began the end of April and was completed in a timely manner due to good planting conditions. Emergence was also good. Potatoes on irrigated acres grew well through the summer. The drought did cut yields on non-irrigated acres. There were low disease and insect pressures across the State and farmers were able to take timely corrective action when needed. At the end of October, potato harvest was nearing completion.

For 2007, Michigan again ranked tenth among States for potato production. Most Michigan potatoes are whites, which comprised approximately 85 percent of planted acreage, followed by russets and reds at 12 and 1 percent of planted acreage, respectively. The yellow category was added in 2007 and comprised approximately 2 percent of planted acres. Whites are processed for potato chips or sold for table use, while russets are used for french fries and other frozen products.

Fall potatoes: Acres, yield, production, and value, 2003-2007

Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Cwt*	*1,000 cwt*	*Dollars*	*1,000 dollars*
2003	46.0	45.5	330	15,015	7.05	105,856
2004	43.0	42.0	325	13,650	6.95	94,868
2005	43.0	42.8	325	13,910	7.90	109,889
2006	43.5	43.0	330	14,190	8.35	118,487
2007	42.5	42.0	350	14,700	8.40	123,480

[1] Marketing year average.

Fall potatoes: Stocks by type as percent of total stocks, December 1, 2003-2007

Type	2003	2004	2005	2006	2007
	Percent	*Percent*	*Percent*	*Percent*	*Percent*
White	86	89	87	87	86
Russet	13	10	12	12	12
Red	1	1	1	1	1
Yellow [1]					1

[1] Estimates began in 2007.

Fall potatoes: Production and disposition, 2003-2007

Crop year	Production	Total used for seed	Farm Disposition		Sold
			Seed, feed, and home use	Shrinkage and loss	
	1,000 cwt	*1,000 cwt*	*1,000 cwt*	*1,000 cwt*	*1,000 cwt*
2003	15,015	1,060	265	1,680	13,070
2004	13,650	860	194	1,656	11,800
2005	13,910	1,044	182	1,728	12,000
2006	14,190	961	180	1,800	12,210
2007	14,700	([1])	([1])	([1])	([1])

[1] Published in September 2008

Fall potatoes: Stocks, 2003-2007

Crop year	December 1	January 1	February 1	March 1	April 1	May 1
	1,000 cwt	*1,000 cwt*	*1,000 cwt*	*1,000 cwt*	*1,000 cwt*	*1,000 cwt*
2003	9,200	7,700	6,200	5,100	3,200	1,500
2004	8,000	6,300	4,800	3,600	2,200	900
2005	7,900	6,200	4,500	3,100	1,700	500
2006	8,100	6,300	4,600	3,300	1,800	700
2007	9,500	7,400	6,200	4,600	2,900	1,600

Soybeans

Michigan soybean production totaled 67.9 million bushels, down 24 percent from 2006. The yield was 39 bushels per acre in 2007, which was above the 5-year average. Planted acres decreased by 250,000 acres from last year. Harvested acres fell accordingly to 1.74 million. However, price went up 57 percent from 2006. Soybean planting began in late April on a limited basis due to cool soil temperatures. Planting progress was faster in the southern districts than the central districts of the State. Soybean planting continued at a rapid pace in May. Planting was nearly complete and early planted beans began to emerge by the beginning of June. The presence of bean leaf beetles was reported in some areas. Development varied by region into July. The southeast fields were at the flowering stage, and the central regions were growing very slowly and were shorter than normal, while growth was progressing well in the southwest on irrigated land. Growth lagged in drier areas and soybean aphids were widespread but mostly low in populations. Soybean harvest was hindered in some areas by green stem re-growth. Scattered precipitation in late October slowed soybean harvest, but it was completed by the middle of November.

Soybeans: Acres, yield, production, and value, 2003-2007

Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Bushels*	*1,000 bushels*	*Dollars*	*1,000 dollars*
2003	2,000	1,990	27.5	54,725	7.30	399,493
2004	2,000	1,980	38.0	75,240	5.72	430,373
2005	2,000	1,990	38.5	76,615	5.73	439,004
2006	2,000	1,990	45.0	89,550	6.27	561,479
2007	1,750	1,740	39.0	67,860	9.85	668,421

[1] Marketing year average.

Soybeans: Stocks by quarter, 2003-2007

Crop year	December 1		March 1		June 1		September 1	
	On farm	Off farm	On farm	Off farm	On farm	Off farm	On farm	Off farm
	1,000 bushels	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
2003	18,000	16,900	7,300	8,200	3,200	2,200	900	685
2004	35,000	21,960	22,000	10,890	7,600	6,530	2,500	2,460
2005	33,000	22,600	22,000	14,600	11,500	6,850	5,000	3,300
2006	38,000	22,700	26,000	18,500	12,000	12,150	3,100	7,800
2007	25,000	29,000	17,000	23,900	3,500	12,200		

Soybeans: Percentage of acreage planted, 2003-2007

Year	Month and day						
	May			June			July
	10	20	30	10	20	30	10
2003	7	18	55	83	97	100	100
2004	24	35	45	72	87	97	100
2005	34	69	90	98	100	100	100
2006	37	56	73	90	99	100	100
2007	14	36	76	96	100	100	100
5-year-average	23.3	42.5	67.8	87.9	96.5	99.4	100.0

Soybeans: Percentage of acreage setting pods, 2003-2007

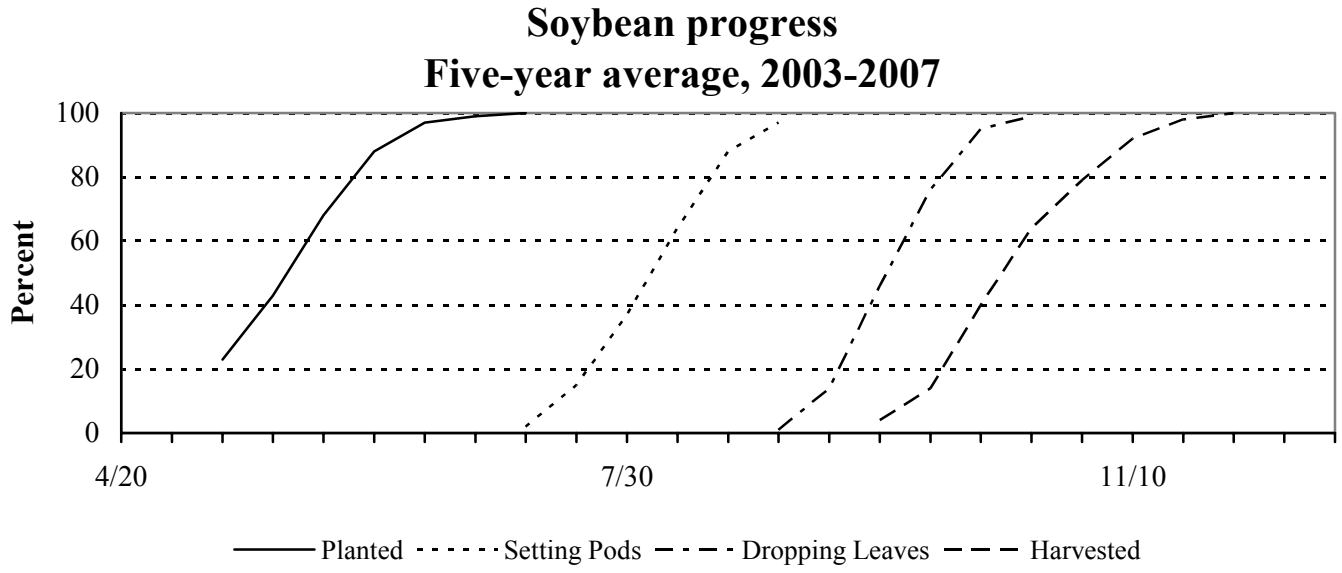
Year	Month and day					
	July			August		
	10	20	30	10	20	30
2003	0	2	16	50	82	97
2004	0	7	23	49	76	88
2005	3	22	55	83	97	100
2006	3	22	42	74	93	99
2007	4	22	48	75	97	100
5-year-average	1.9	14.9	36.8	63.5	88.4	96.6

Soybeans: Percentage of acreage shedding leaves, 2003-2007

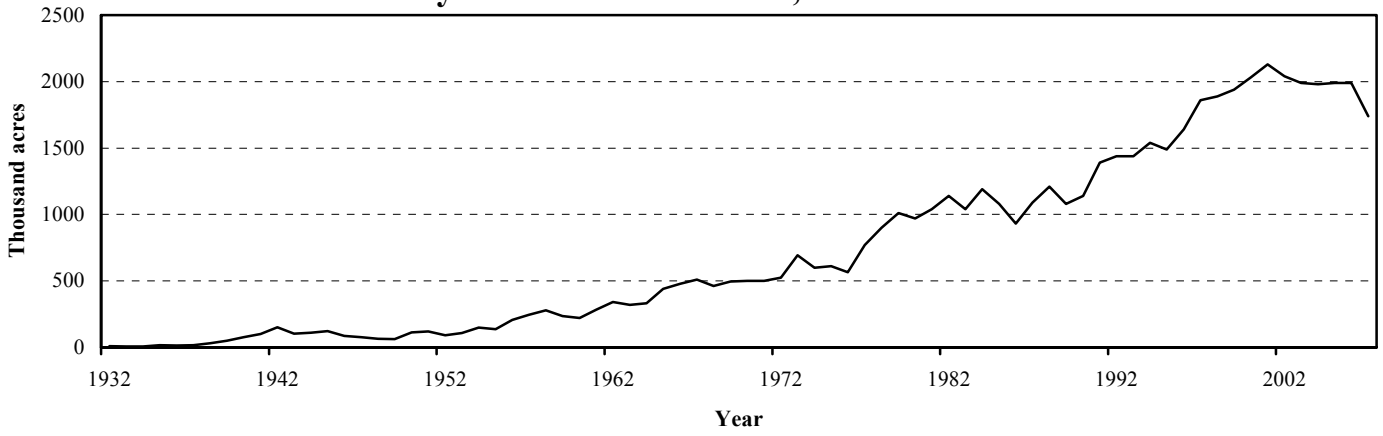
Year	Month and day						
	August		September			October	
	20	30	10	20	30	10	20
2003	0	0	5	44	80	97	100
2004	0	0	4	18	52	91	96
2005	0	3	37	82	95	100	100
2006	0	1	15	44	75	90	99
2007	0	1	10	42	76	98	100
5-year-average	0.0	1.0	14.2	46.1	75.5	95.1	99.0

Soybeans: Percentage of acreage harvested, 2003-2007

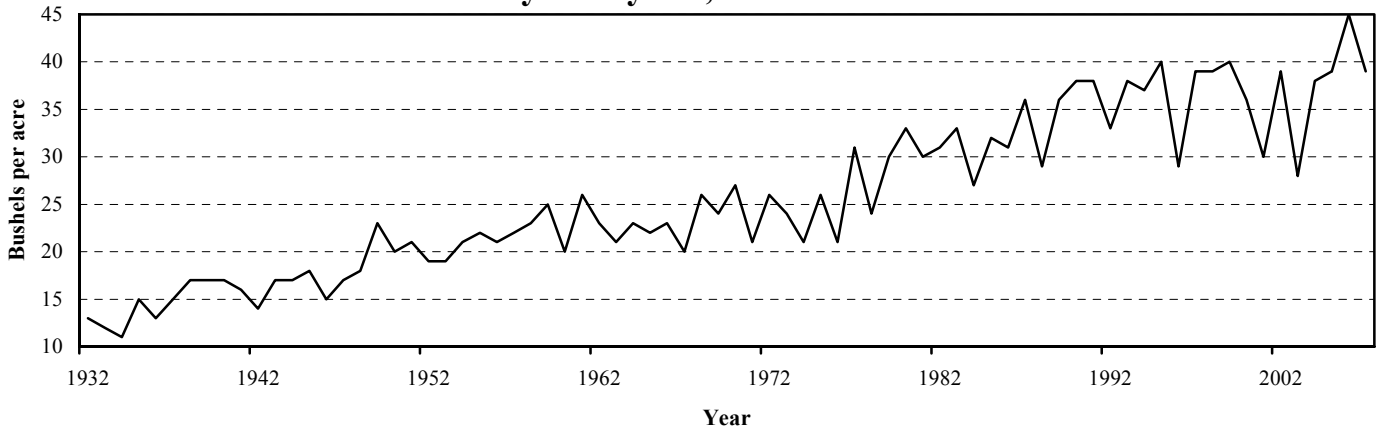
Year	Month and day								
	September			October			November		
	10	20	30	10	20	30	10	20	30
2003	0	1	7	35	72	91	97	100	100
2004	0	1	11	40	58	69	81	96	100
2005	0	11	33	69	87	93	99	100	100
2006	0	4	7	23	42	60	84	93	98
2007	0	1	10	33	60	81	96	100	100
5-year-average	0.0	3.6	13.5	40.0	63.7	78.9	91.5	97.7	99.7



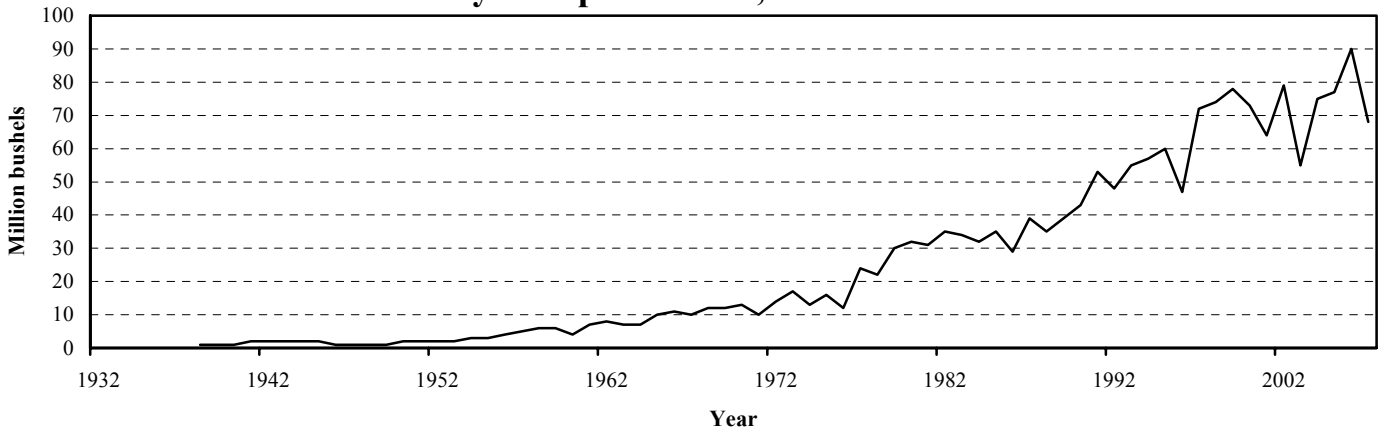
Soybean harvested acres, 1932-2007



Soybean yield, 1932-2007



Soybean production, 1932-2007



Sugarbeets

Acres planted to sugarbeets were estimated at 150,000 in 2007, down 5,000 acres from the previous year. Harvested acreage was estimated at 149,000, down from 154,000 in 2006. The yield set a new record with 23.4 tons per acre. The previous record high was 23.2 set in 2006. Even though there was a record yield, harvested acres were down and this decreased production to a total of 3.49 million tons, down 2 percent from 2006. Planting was finished by mid-May with good emergence in most fields. The unseasonably warm fall and rains in September and October added tonnage to Michigan's sugarbeet crop. Harvest was completed in early November.

Sugarbeets: Acres, yield, production, and value, 2003-2007

Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Tons*	*1,000 tons*	*Dollars*	*1,000 dollars*
2003	179	178	19.1	3,400	36.70	124,780
2004	165	163	21.1	3,439	26.40	90,790
2005	154	152	21.3	3,238	34.40	111,387
2006	155	154	23.2	3,573	39.85	142,384
2007	150	149	23.4	3,487	([2])	([2])

[1] Marketing year average.
[2] Published in February 2009.

Wheat

Michigan's 2007 winter wheat crop totaled 35.1 million bushels, a 26 percent decrease from 2006. Planted acres decreased to 560,000 acres from 660,000 the previous year. Harvested acreage was down 17 percent from last year, at 540,000 acres. The average yield, at 65 bushels per acre, was down 11 percent from last year. The value of the crop increased 16 percent to $187 million. Huron, Sanilac, Tuscola, Lenawee, and Saginaw were the top five counties in wheat production.

Winter wheat planting began in late September and progression was behind the five-year average. Due to colder and wetter conditions, emergence was behind normal. The crop over-wintered fairly well despite some damage as a result of frost. Warm temperatures and rainfall advanced crop growth, pushing development well ahead of normal. Winter wheat continued to advance well, in May, with some reports of powdery mildew and septoria. By the middle of June, heading was completed and flowering was nearly completed in many areas. Ninety-six percent of the crop was turning yellow by the first week of July, compared with a five-year average of 65 percent.

Harvest began the middle of July and concluded by the end of July due to the hot and dry weather conditions. Fields were harvested and had varying degrees of foliar diseases but had a low incidence of head scab. Overall, the crop was generally of good quality.

Wheat: Acres, yield, production, and value, 2003-2007

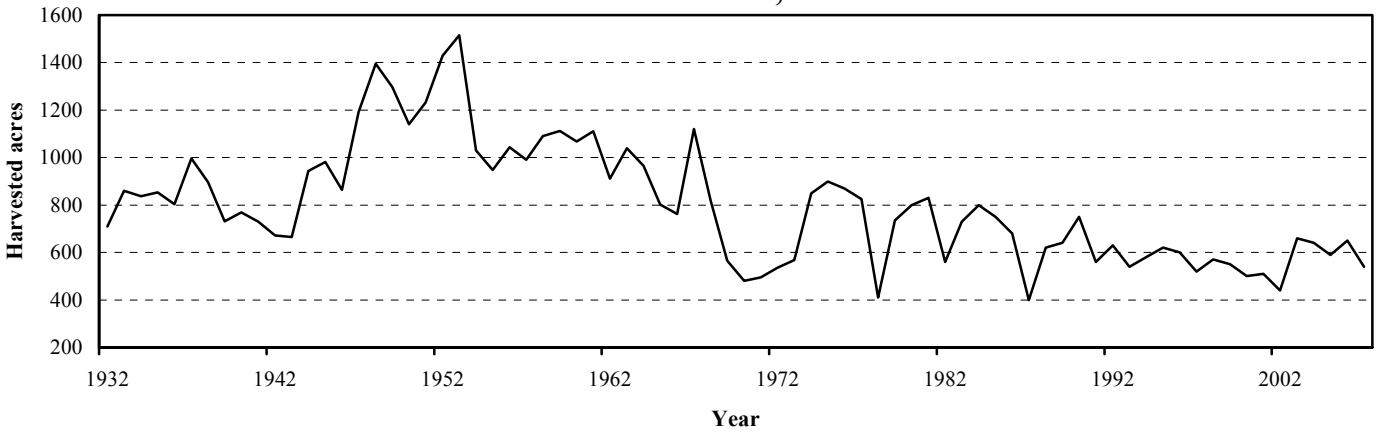
Year	Planted	Harvested	Yield	Production	Price [1]	Value of production
	1,000 acres	*1,000 acres*	*Bushels*	*1,000 bushels*	*Dollars*	*1,000 dollars*
2003	680	660	68	44,880	3.25	145,860
2004	660	640	64	40,960	3.01	123,290
2005	600	590	66	38,940	3.13	121,882
2006	660	650	73	47,450	3.41	161,805
2007	560	540	65	35,100	5.35	187,785

[1] Marketing year average.

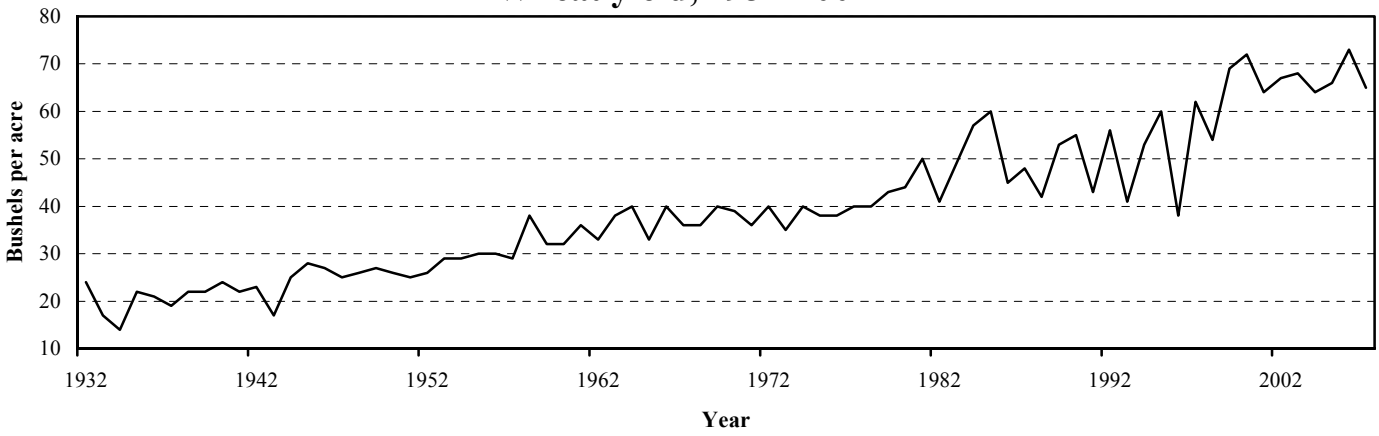
Wheat: Stocks by quarter, 2003-2007

Crop year	September 1		December 1		March 1		June 1	
	On farm	Off farm	On farm	Off farm	On farm	Off farm	On farm	Off farm
	1,000 bushels	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*	*1,000 bushels*
2003	5,000	28,430	2,800	23,050	600	15,190	300	7,310
2004	7,800	28,430	3,500	24,350	2,900	19,160	800	14,770
2005	6,900	28,450	3,600	23,700	1,300	17,800	600	10,550
2006	7,500	33,200	3,800	25,975	1,400	18,400	300	12,250
2007	2,600	30,400	2,400	21,600	300	14,230	70	7,270

Wheat harvested acres, 1932-2007



Wheat yield, 1932-2007



Wheat production, 1932-2007